ADDON®

NHP5010BD1 500Mbps Powerline AV Wireless N AP Router Starter Kit

Important:
This Quick Installation Guide only gives you a brief idea to connect the devices.The details on using software are also available in the CD.

ADD-NHP5010BD1 Quick Installation Guide

Package Contents:

- One 500Mbps Powerline AV Wireless N AP Router
- One Software CD
- Two RJ45 Ethernet Cables
- One 500Mbps Powerline AV Adapters
- One Quick Installation Guide

Package Includes:

- 1 x Addon **HP5100S** Powerline Ethernet Adapter
- 1 x Addon **NHP5010** Powerline Wireless/Ethernet Adapter
- 2 x Ethernet Cable RJ45
- 1 x Quick Install Guide
- 1 x Resource CD

Powerline Adapter (also called **Homeplug**) is a device that carries the internet signal through the existing home electrical wiring in the same electrical ring in the same building.

They work as a pair, which means that you need at least two powerline, but you can add additional ones to work together.

You just need to connect the first unit (**HP5100S**) to the router by Ethernet cable (included in the box) and connect the second unit (**NHP5010**) in another room, and you will get wireless internet signal from the second unit.

For start and create your Powerline Network, please follow:

a) **Create your Powerline Network step by step (Page 2)**

For advanced features, please follow:

b) **Login to the Management Page (Page 5)**
c) **Setup Wireless Security Key for the NHP5010 (Page 10)**
d) **Change the Wireless Network Name SSID (Page 12)**
e) **Use the NHP5010 as an Access Point (Page 14)**
f) **Use the NHP5010 as a Router (Page 15)**
g) **Software Installation (Page 18)**
h) **Use of the Security Pushbutton (Page 24)**
i) **Use of the WPS Pushbutton (Page 25)**
j) **Reset the NHP5010 (Page 25)**

a) Create your Powerline Network step by step

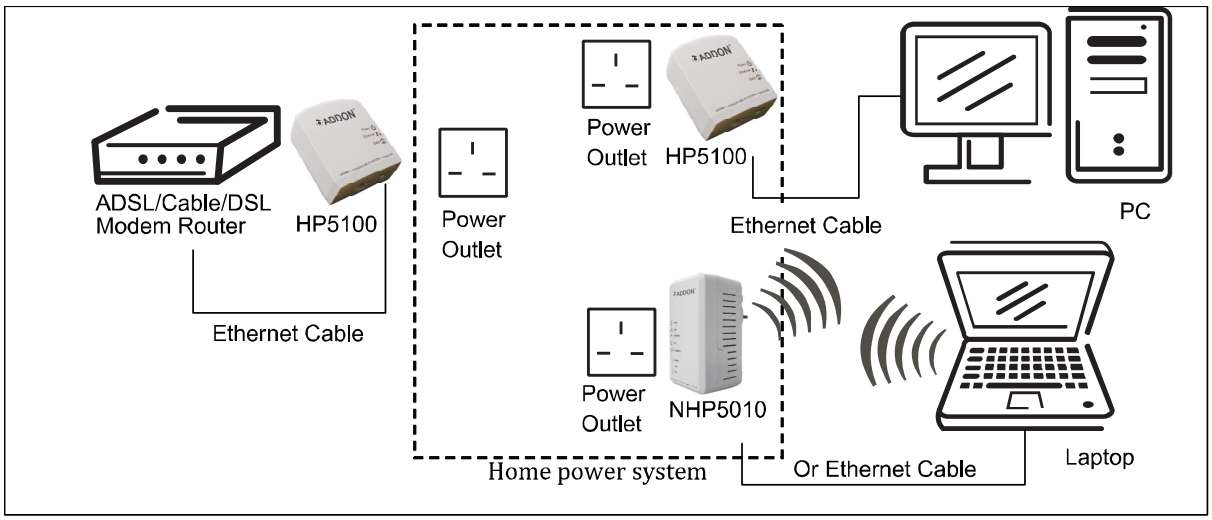


Figure 1 Hardware Connection

To establish Home Network with ADDON NHP5010, it needs one NHP5010 and one HP5100S. One is connected to computer and the other one is connected the router, as shown in Figure 1

1. Connect the HP5100 to your router

- Plug Ethernet cable into the Ethernet port of HP5100.

- Make sure your ADSL/Cable/DSL modem router is working correctly and plug the other end of the cable into the Ethernet port of the router.

- Plug HP5100 into your home wall outlet.

2. Connect the NHP5010 to your computer/device by Ethernet Cable or by Wireless (Page 3)

How to connect the NHP5010 by Ethernet Cable:

- Plug Ethernet cable into the Ethernet port of NHP5010.

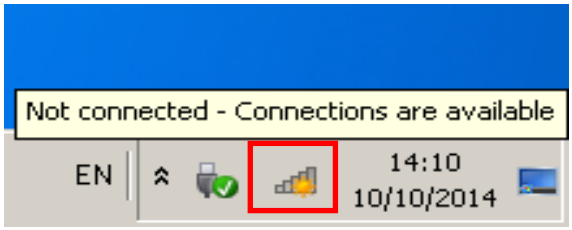
- Plug the other end of the cable into the Ethernet port of the computer.

- Plug NHP5010 into your home wall outlet.

How to connect the NHP5010 by Wireless:

1. Scan the available wireless networks around you by using the Wireless LAN Utility of your wireless LAN adapter or click on the WLAN icon ( )on the bottom-right corner.

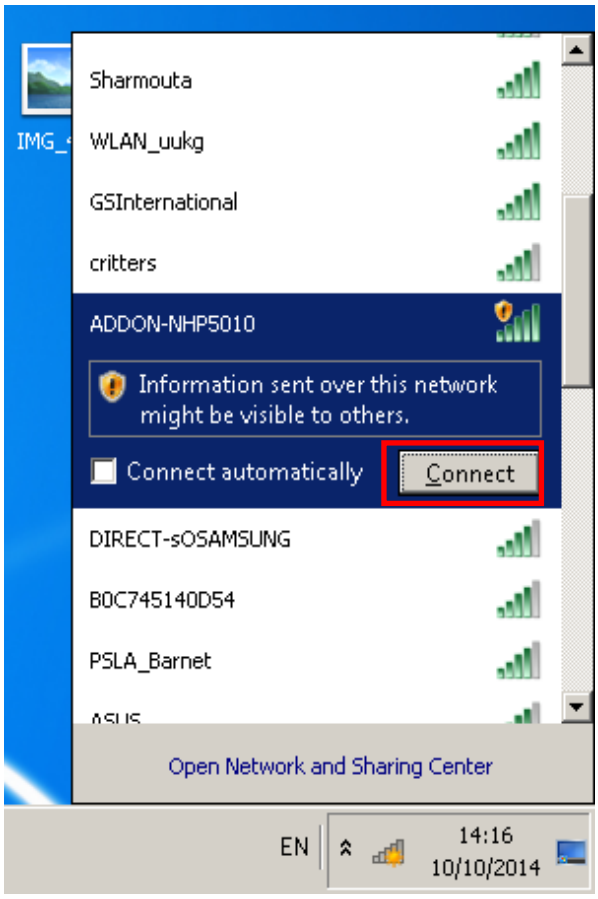
   Windows 7:



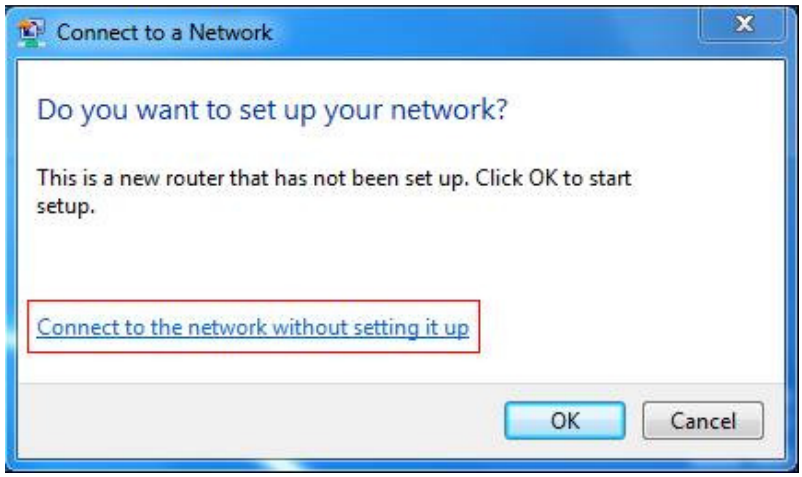
   Windows 8:

2. You will see one of the networks SSID called ADDON NHP5010. Highlight it and click on Connect.

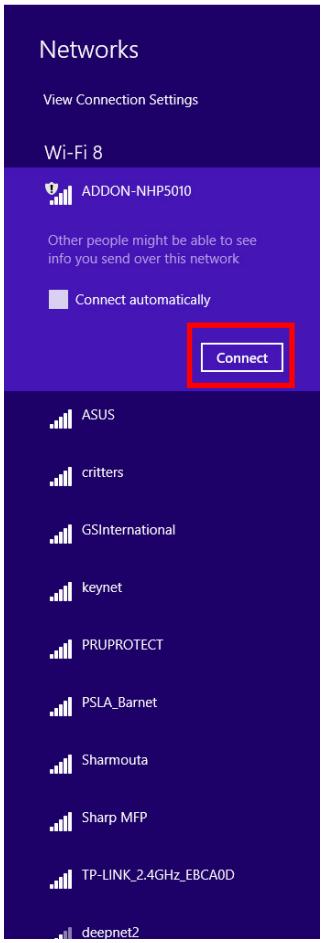
   Windows 7



*Note: If you see the following message "**Do you want to set up your network?**" please click on "**Connect to the network without setting it up**"*


Connect to a Network
Do you want to set up your network?
This is a new router that has not been set up. Click OK to start setup.
Connect to the network without setting it up
OK
Cancel

Windows 8



3. Get Internet access immediately

*Note: You **do not need to follow the next steps**, unless you want to **login to the management page** and **set up the Wireless Security Key** for the NHP5010.*

b) Login to the management page:

By default, the DHCP server is disabled. You need to set the IP address manually before you can login to NHP5010 management page.

Note: The configuration steps and figures on Windows 7 / Windows 8 / 8.1 are shown as an example. The configuration process may be different, depending on operating system of your PC.

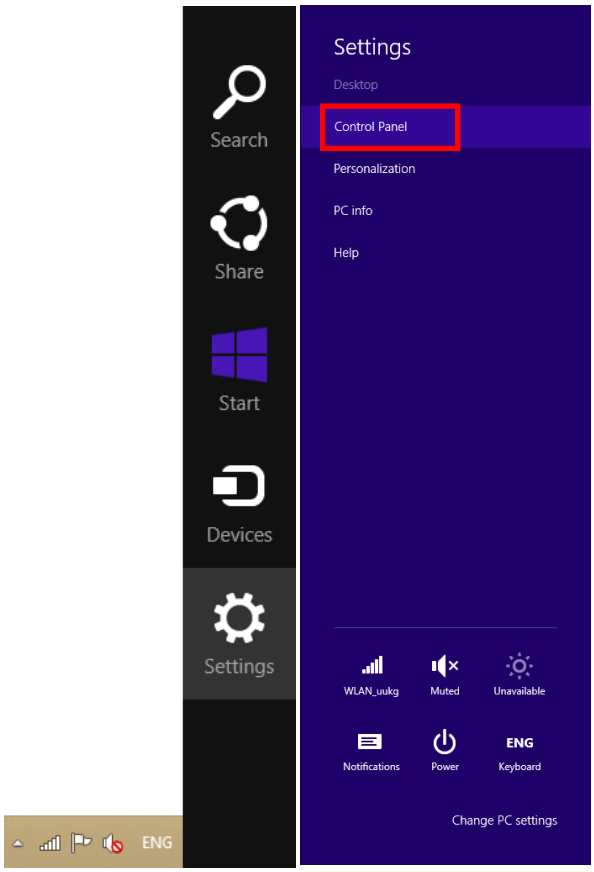
To set the IP address manually, please follow the instruction below:

1. Connect your computer to the NHP5010 by Ethernet cable or by Wireless (follow the steps at page 3 and page 4)

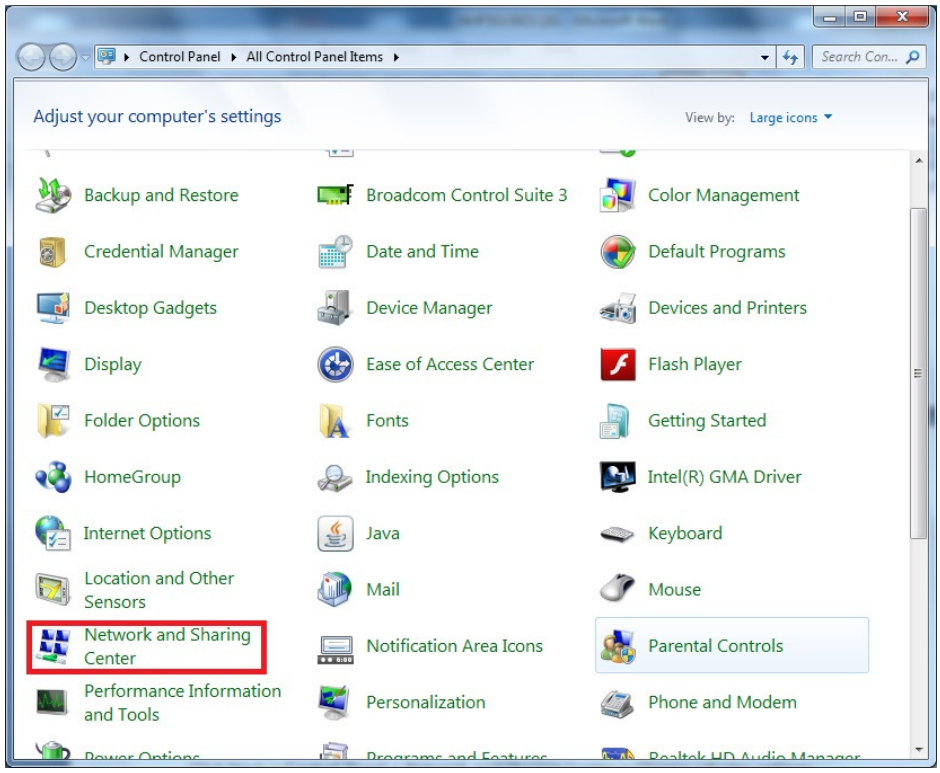
2. Open *Control Panel*

   Windows 7:
   Click *Start -> Control Panel*

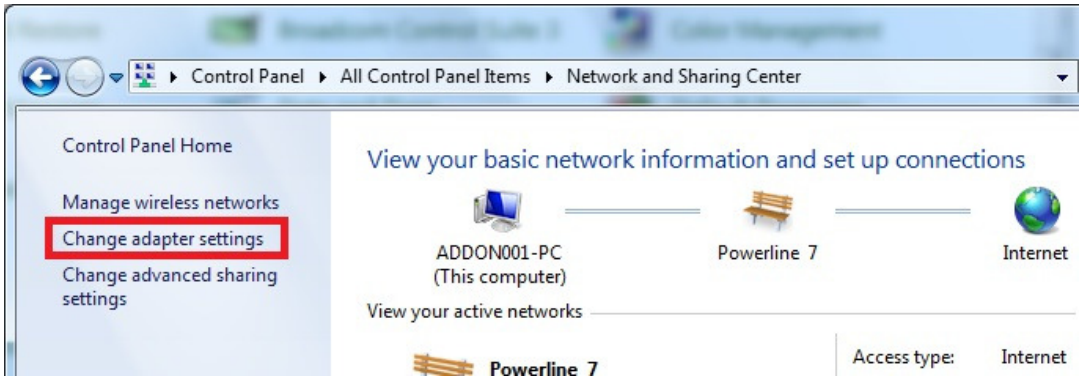
   Windows 8:
   Swipe in from the right edge of the screen, then tap *Settings->Control Panel*
   (If you're using a mouse, point to the bottom-right corner of the screen, move the mouse pointer up, then click Settings.)



3. Click *Network and Sharing Center*

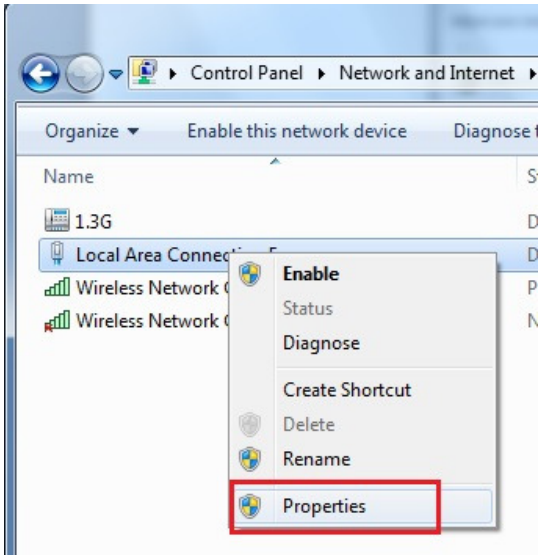


4. Click *Change adapter settings*

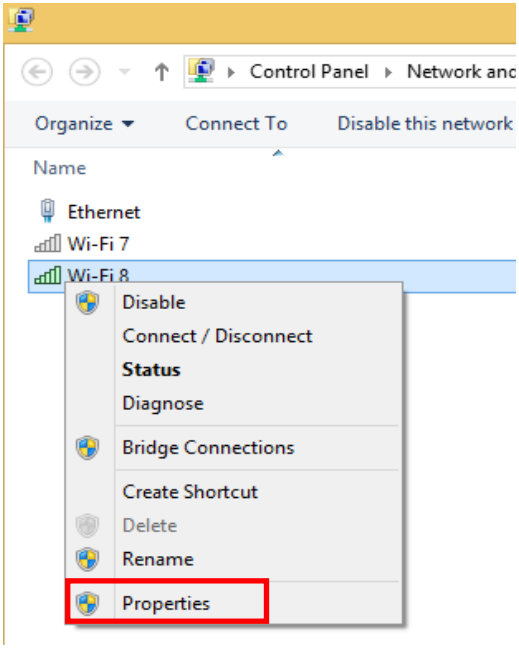


5. Open *Connection Properties*

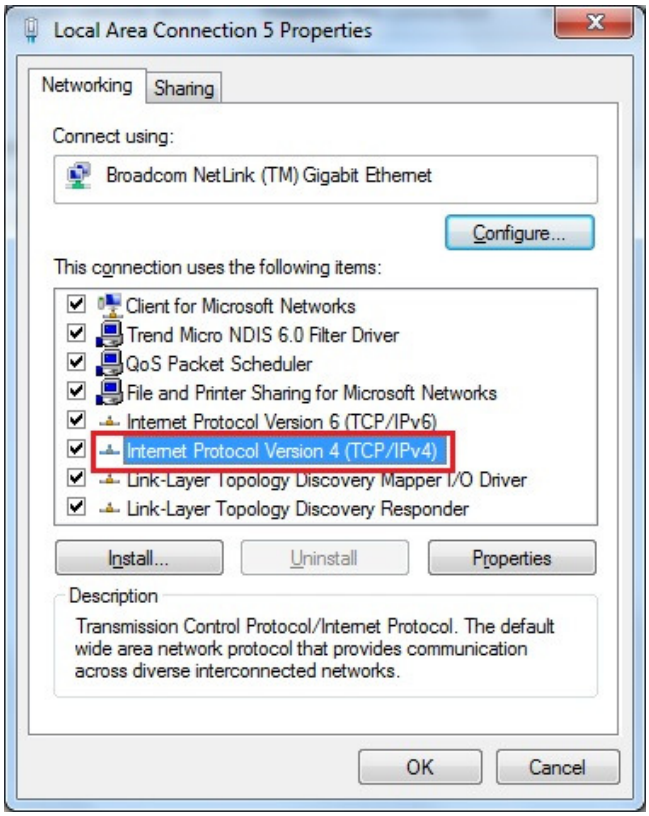
<u>If you are connected to the NHP5010 by *Ethernet cable*</u>
Right click on Local Area Connection (or Ethernet in Windows 8) -> *Properties*



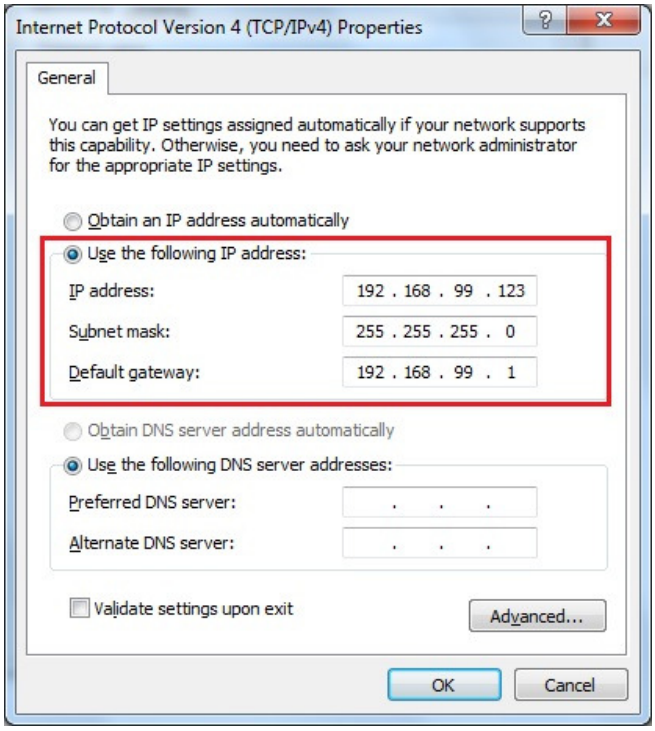
<u>OR If you are connected to the NHP5010 by *Wireless*</u>
Right click on the Wireless Network Connection->select Properties



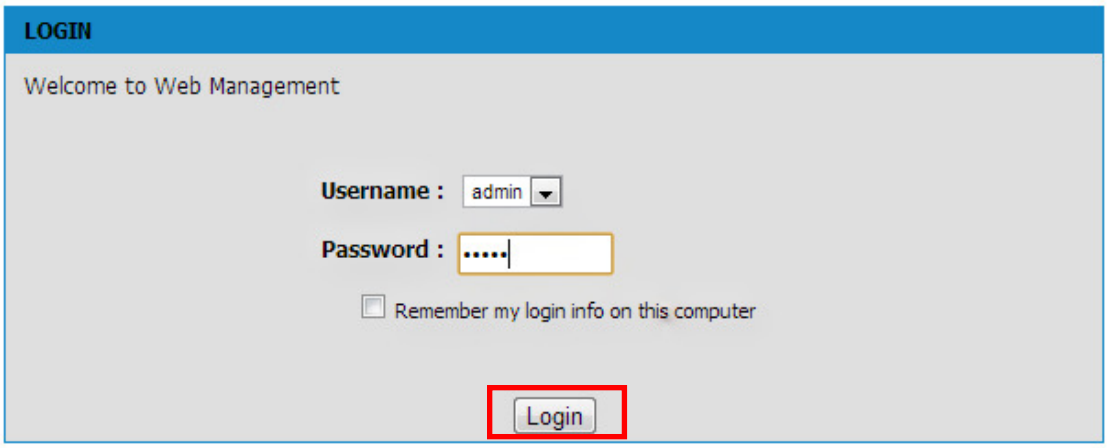
6. Double click on Internet Protocol Version 4 (TCP/IPv4)



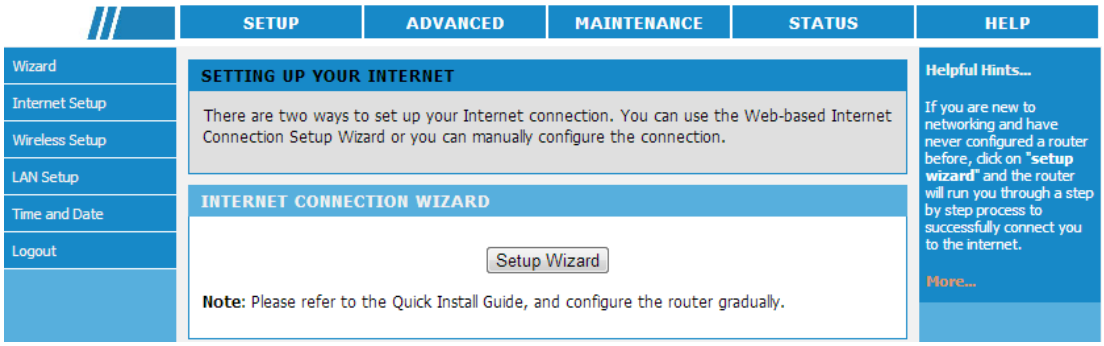
7. Select Use the following IP address and enter the IP address of your PC. Set the IP address to 192.168.99.123, set the subnet mask to 255.255.255.0 and set the default gateway to 192.168.99.1. Then Click OK.


Internet Protocol Version 4 (TCP/IPv4) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 192 . 168 . 99 . 123
Subnet mask: 255 . 255 . 255 . 0
Default gateway: 192 . 168 . 99 . 1
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Validate settings upon exit
Advanced...
OK
Cancel

8. Open the web browser; enter 192.168.99.1 in the address bar and press ENTER,
9. Login by using the default username: **admin** and the password: **admin**.



10. Click Login and the following page appears


SETUP
ADVANCED
MAINTENANCE
STATUS
HELP
Wizard
Internet Setup
Wireless Setup
LAN Setup
Time and Date
Logout
SETTING UP YOUR INTERNET
There are two ways to set up your Internet connection. You can use the Web-based Internet Connection Setup Wizard or you can manually configure the connection.
INTERNET CONNECTION WIZARD
Setup Wizard
Note: Please refer to the Quick Install Guide, and configure the router gradually.
Helpful Hints...
If you are new to networking and have never configured a router before, click on "setup wizard" and the router will run you through a step by step process to successfully connect you to the internet.
More...

You are now into the NHP5010 Management page.

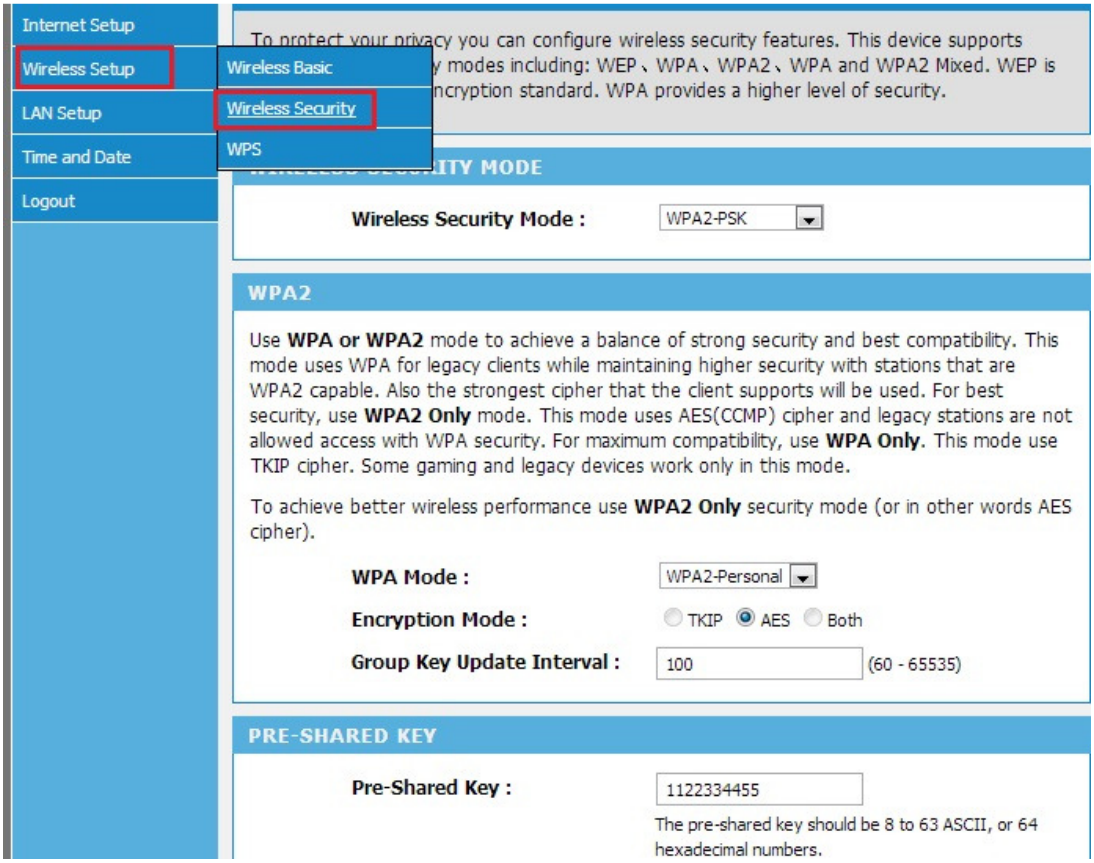
If you want to setup the Wireless Security Key, please go to page 10.

If you want to change the Wireless Network Name (SSID), please go to page 12.

c) Setup Wireless Security Key for the NHP5010:

1. If you want to setup a Wireless Security Key for the NHP5010, you need to login to the NHP5010 management page. Please refer to the section "**Login to the management page of NHP5010**" (Page 5 to 9).

2. Click Wireless Setup-> Wireless Security


Internet Setup
Wireless Setup
LAN Setup
Time and Date
Logout
Wireless Basic
Wireless Security
WPS
To protect your privacy you can configure wireless security features. This device supports
modes including: WEP、WPA、WPA2、WPA and WPA2 Mixed. WEP is
ncryption standard. WPA provides a higher level of security.
ITY MODE
Wireless Security Mode :
WPA2-PSK
WPA2
Use WPA or WPA2 mode to achieve a balance of strong security and best compatibility. This mode uses WPA for legacy clients while maintaining higher security with stations that are WPA2 capable. Also the strongest cipher that the client supports will be used. For best security, use WPA2 Only mode. This mode uses AES(CCMP) cipher and legacy stations are not allowed access with WPA security. For maximum compatibility, use WPA Only. This mode use TKIP cipher. Some gaming and legacy devices work only in this mode.
To achieve better wireless performance use WPA2 Only security mode (or in other words AES cipher).
WPA Mode :
WPA2-Personal
Encryption Mode :
TKIP
AES
Both
Group Key Update Interval :
100
(60 - 65535)
PRE-SHARED KEY
Pre-Shared Key :
1122334455
The pre-shared key should be 8 to 63 ASCII, or 64 hexadecimal numbers.

You can choose different security type from dropdown list. For example, you can choose Security Mode WPA2-Personal, select AES for WPA Algorithms and enter your network key into "Pre-Shared Key" field.

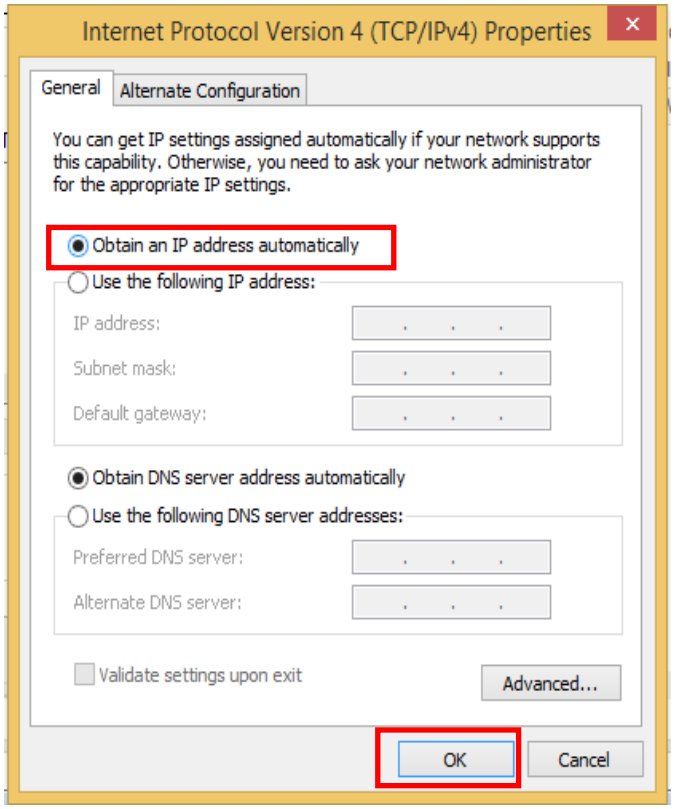
You can type the same password of your wireless router or choose a different one.

This password would be the password that you will use to connect to the NHP5010.

3. Click **Apply** to save the changes (your wireless connection will be disconnected automatically if you are using the wireless connection when you setup the wireless security).

4. Your wireless connection will be disconnected automatically if you are using the wireless connection when you setup the wireless security. Please wait for a few seconds and reconnect to it by entering your network key. Make sure HP5100 is connected to the router before reconnecting the PC or laptop to NHP5010 by wireless.

5. IMPORTANT: If you want to change the Wireless Network Name (SSID), please go to page 12. If you have finished and you want to logout from the management page, please go back to **Internet Protocol Version 4 (TCP/IPv4)** Properties (follow the instructions from point 1 to point 5), select **Obtain an IP address automatically** and **Use DNS server address automatically** and then click OK.


Internet Protocol Version 4 (TCP/IPv4) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Validate settings upon exit
Advanced...
OK
Cancel

6. If you cannot access the Internet after reconnecting to wireless Homeplug, then turn off NHP5010 and turn it on again.
7. Connect your PC or laptop to NHP5010 again. You should be able to access the Internet.

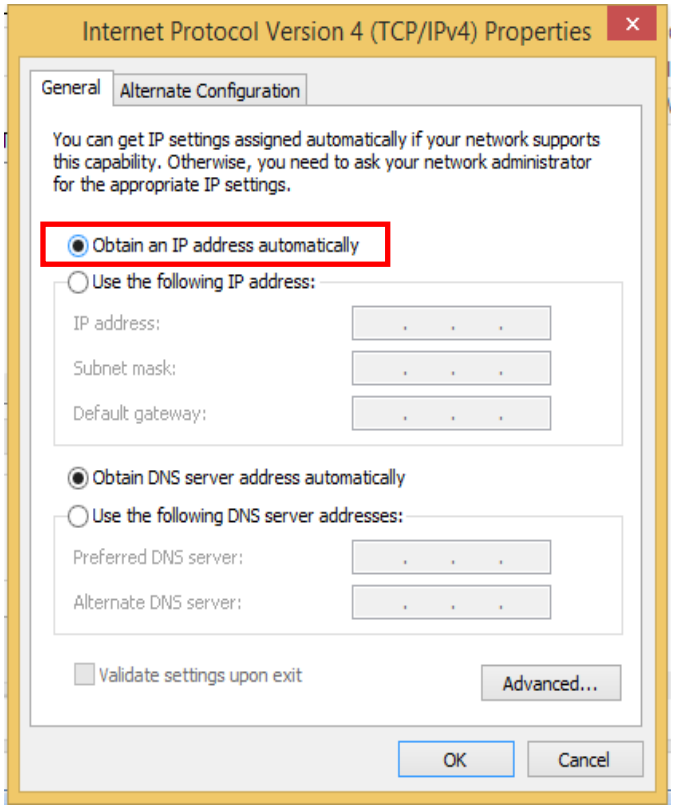
d) Change the Wireless Network Name (SSID):

If you want to change the name of the SSID of the wireless network from "ADDON-NHP5010" to a customized one, you need to login to the NHP5010 management page. Please refer to the section "**Login to the management page of NHP5010**" (Page 5 to Page 9).

1. Click Wireless Setup-> Wireless Basic

2. Change the *Wireless Network Name (SSID)* from ADDON-NHP5010 to the one that you want (for example MYROOM) -> click *Apply*

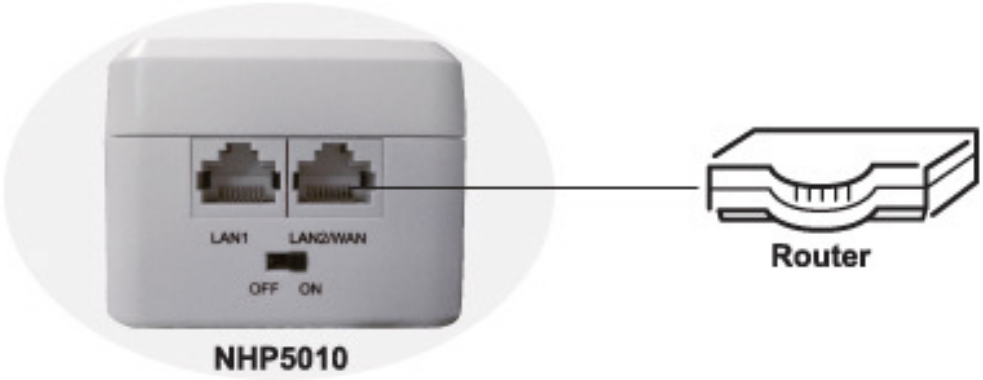
3. IMPORTANT: Go back to **Internet Protocol Version 4 (TCP/IPv4)** Properties (follow the instructions from point 1 to point 5), select **Obtain an IP address automatically** and **Use DNS server address automatically** and then click OK.


Internet Protocol Version 4 (TCP/IPv4) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Validate settings upon exit
Advanced...
OK
Cancel

4. Your wireless connection will be disconnected automatically if you are using the wireless connection when you setup the wireless security. Please wait for a few seconds and reconnect to it by entering your network key. Make sure HP5100 is connected to the router before reconnecting the PC or laptop to NHP5010 by wireless.
5. If you cannot access the Internet after reconnecting to wireless Homeplug, then turn off NHP5010 and turn it on again.
6. Connect your PC or laptop to NHP5010 again. You should be able to access the Internet.

e) Use the NHP5010 as an Access Point

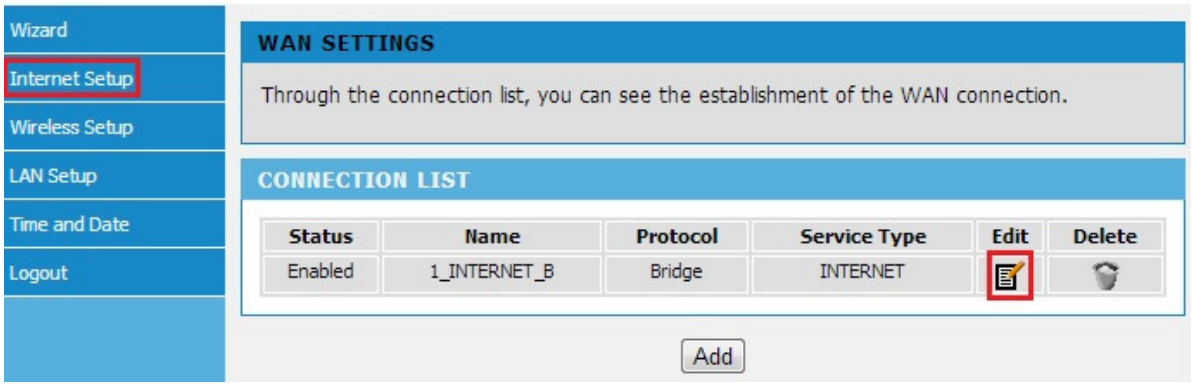
To use NHP5010 as an Access Point, connect the router to LAN2/WAN port of NHP5010 by Ethernet cable. No settings need to be changed.



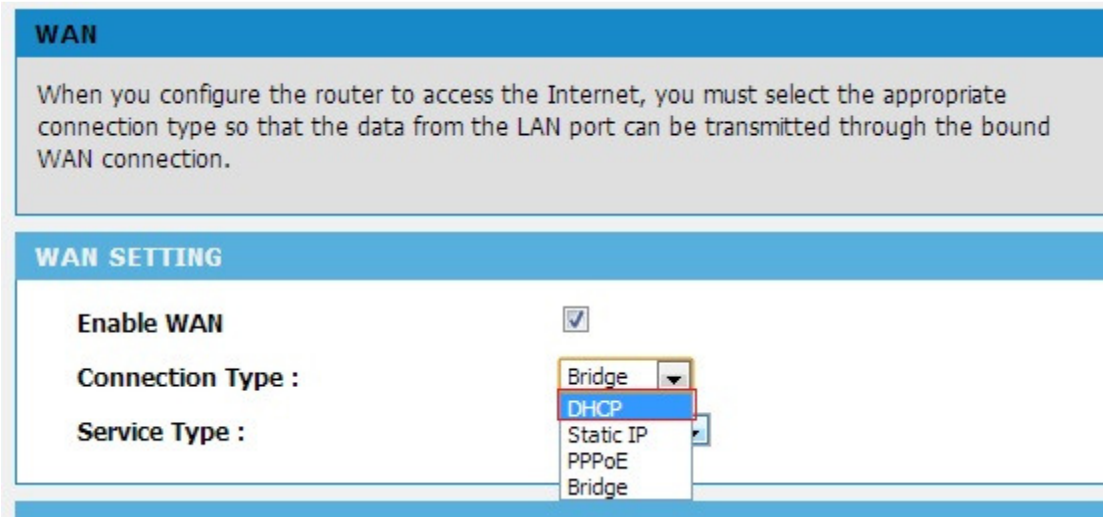
f) Use the NHP5010 as an Access Point

To use NHP5010 as a router, you need to login to its management page. Please refer to the section "**How to login to the management page of NHP5010**" (Page 5 to 9).

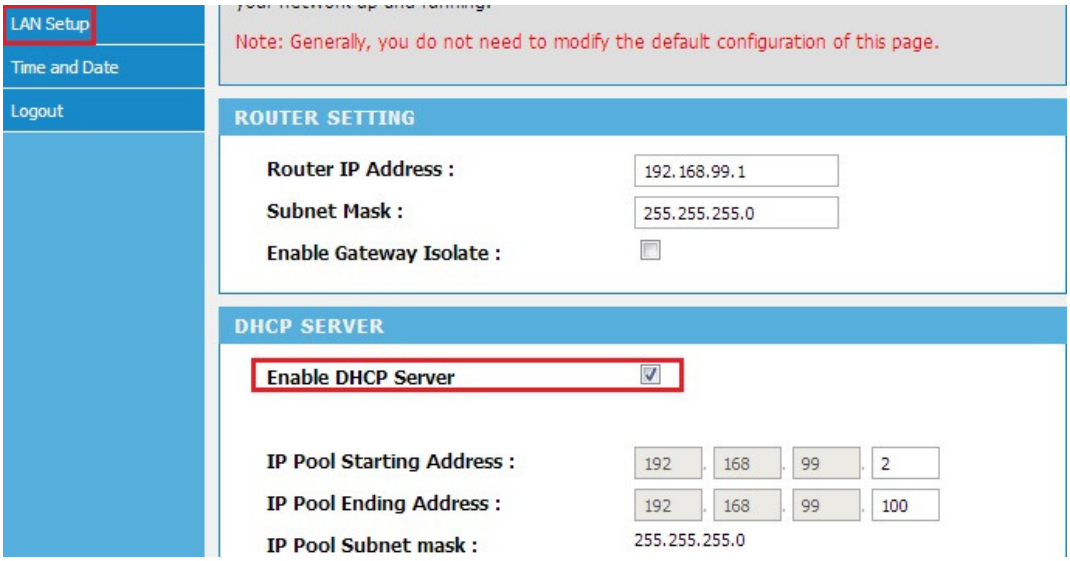
1. Login to the management page of NHP5010->Click Internet Setup->Click Edit



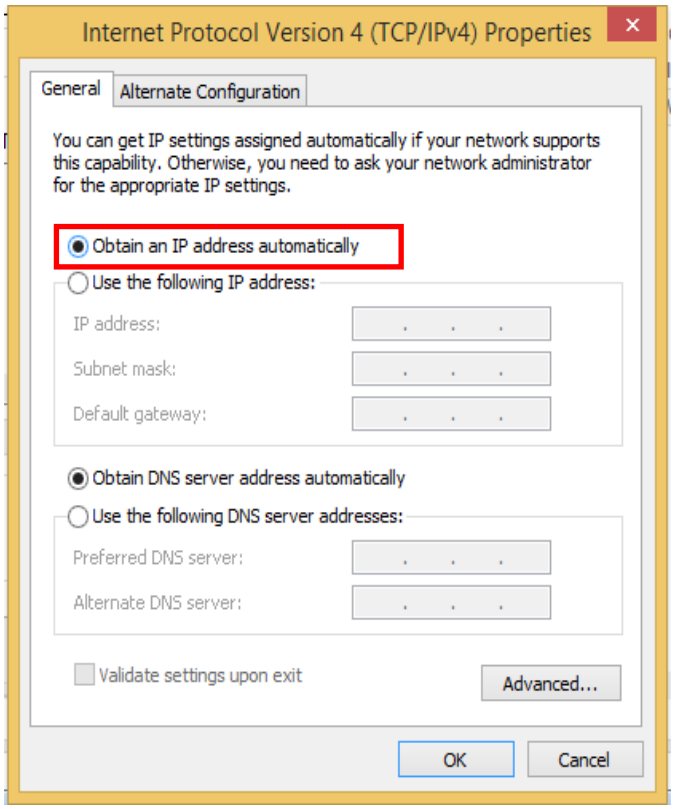
2. Change the **Connection Type** to DHCP and click Apply


WAN
When you configure the router to access the Internet, you must select the appropriate connection type so that the data from the LAN port can be transmitted through the bound WAN connection.
WAN SETTING
Enable WAN
Connection Type :
Service Type :
Bridge
DHCP
Static IP
PPPoE
Bridge

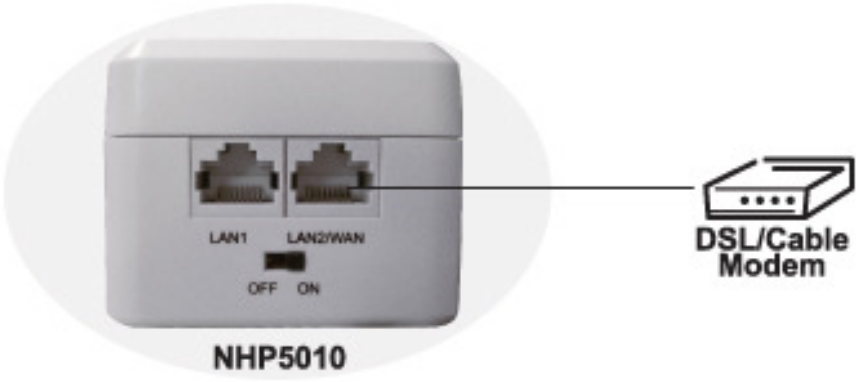
3. Click LAN Setup->Check the box to Enable DHCP Server and click Apply



4. IMPORTANT: Go back to **Internet Protocol Version 4 (TCP/IPv4)** Properties (follow the instructions from point 1 to point 5), select **Obtain an IP address automatically** and **Use DNS server address automatically** and then click OK.


Internet Protocol Version 4 (TCP/IPv4) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Validate settings upon exit
Advanced...
OK
Cancel

5. Connect DSL/Cable modem to LAN2/WAN port of NHP5010 by Ethernet cable.



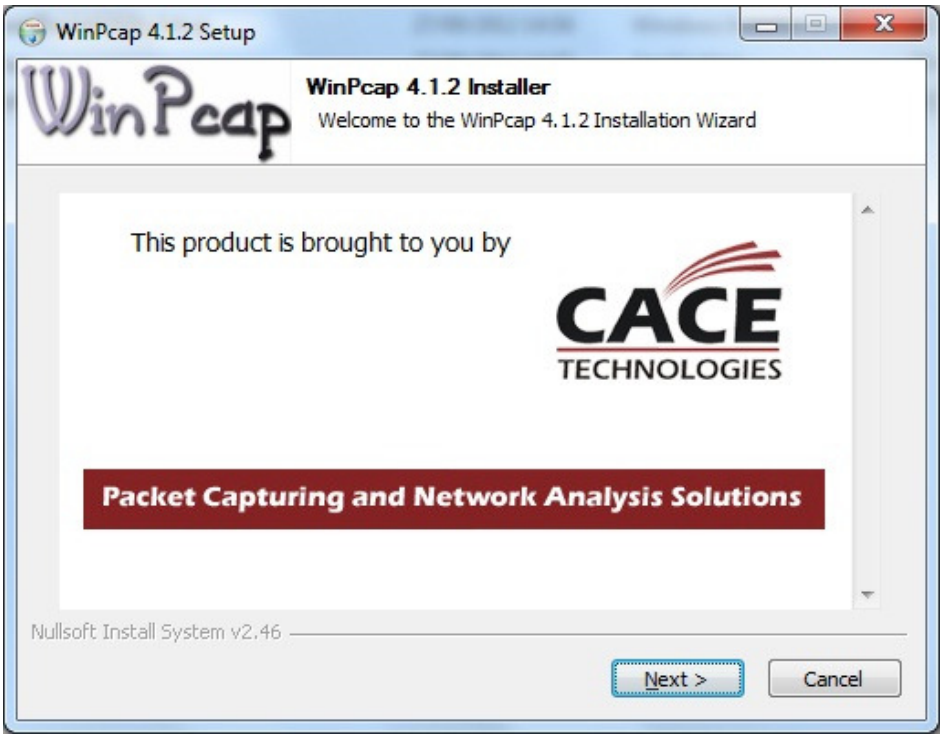
g) Software Installation

Note: ***Powerline AV adapters are 'plug and play' devices and can be worked without installing software in the resource CD.*** *But to identify Powerline AV devices on the powerline network, measures the data rate performance, ensure privacy and perform diagnostics and customize the Private Network Name, you should install PowerPacket Utility via the installation resource CD.*

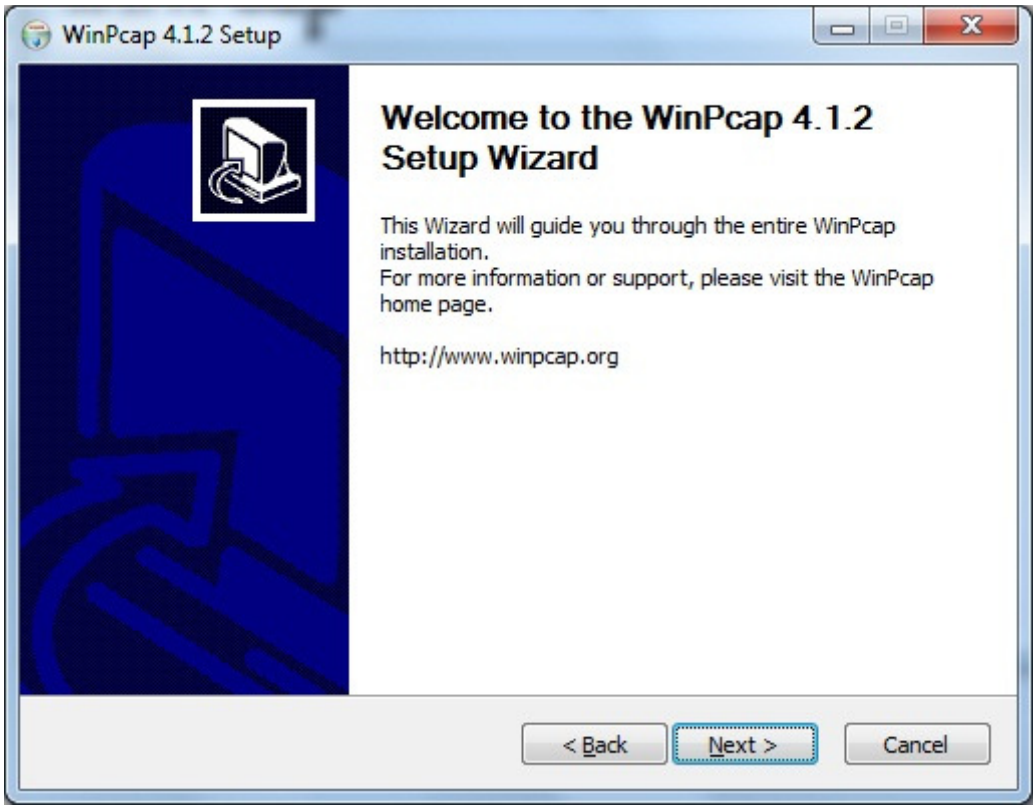
The Utility works in Windows Operating Systems only.

To install Utility, you must install WinPcap first in the CD.

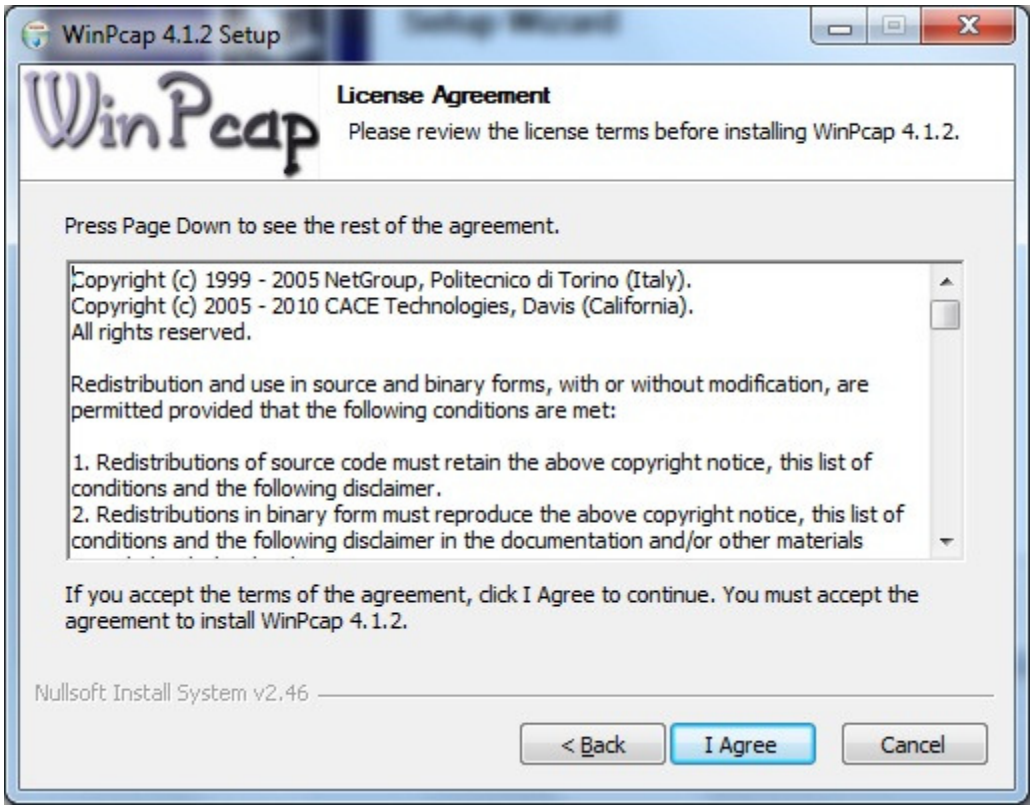
1. Insert software CD into CD-ROM drive and open it. Click on "**WinPcap_4_1_2.exe**". And click on "**Next**" to continue.



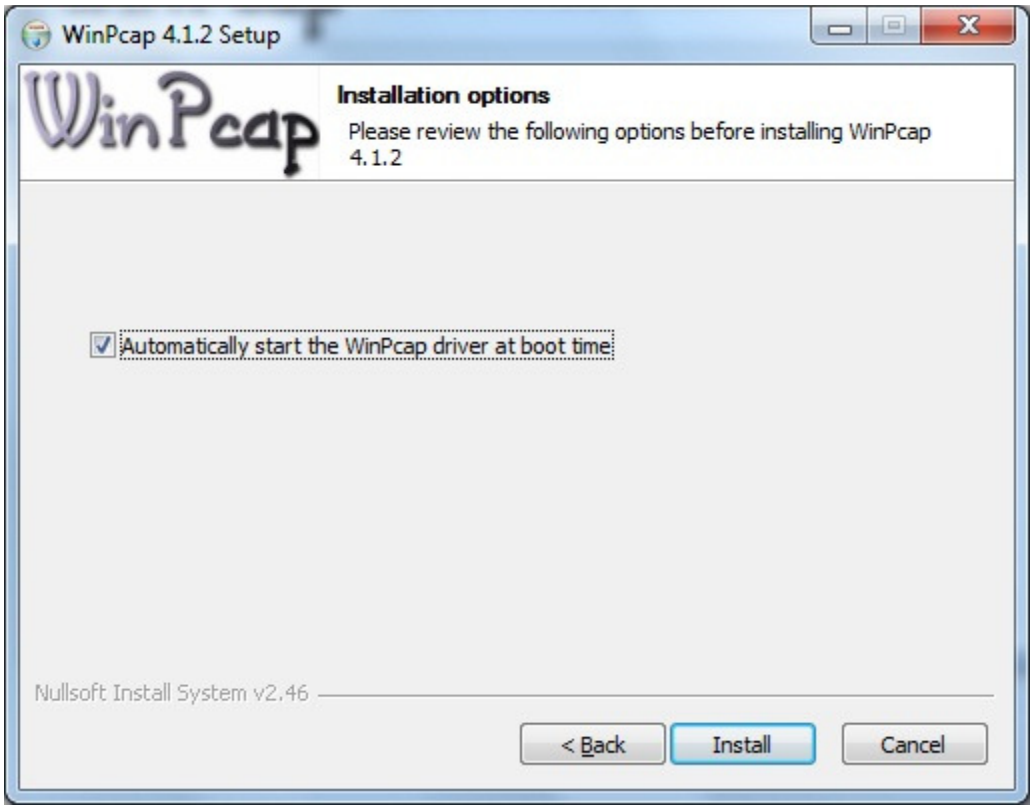
2. Click on “**Next**” to continue.


WinPcap 4.1.2 Setup
Welcome to the WinPcap 4.1.2 Setup Wizard
This Wizard will guide you through the entire WinPcap installation.
For more information or support, please visit the WinPcap home page.
http://www.winpcap.org
< Back
Next >
Cancel

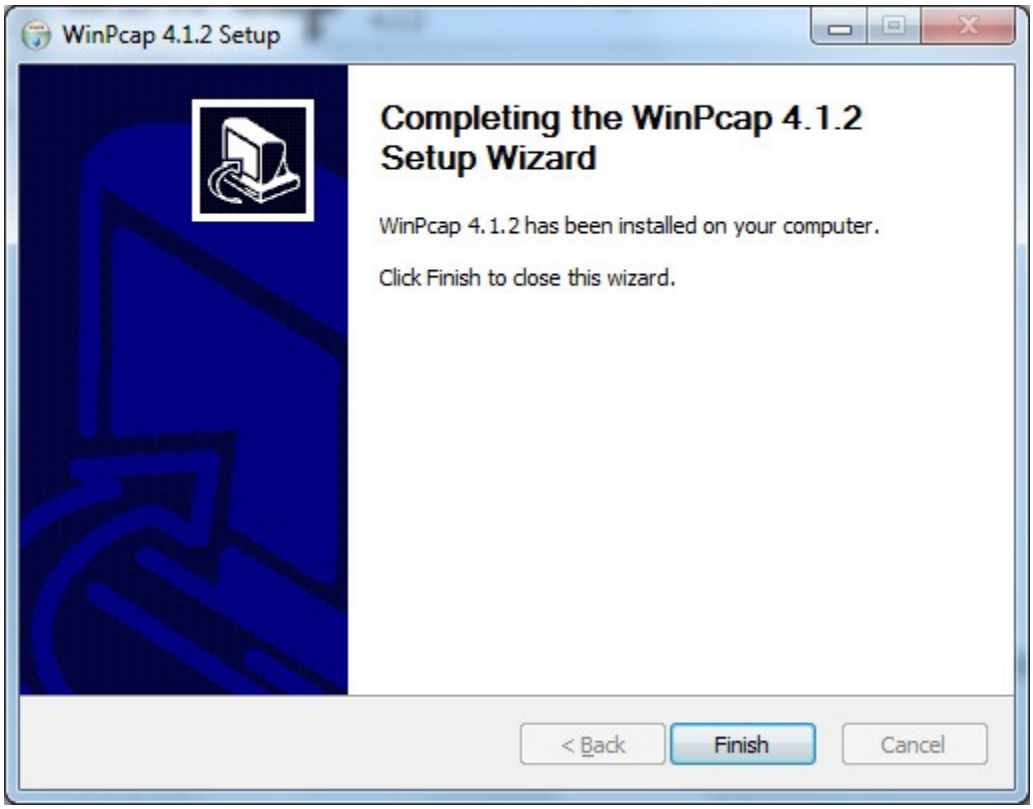
3. Click on “**I agree**” to continue


WinPcap 4.1.2 Setup
License Agreement
Please review the license terms before installing WinPcap 4.1.2.
Press Page Down to see the rest of the agreement.
Copyright (c) 1999 - 2005 NetGroup, Politecnico di Torino (Italy).
Copyright (c) 2005 - 2010 CACE Technologies, Davis (California).
All rights reserved.
Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:
1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials
If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install WinPcap 4.1.2.
Nullsoft Install System v2.46
< Back
I Agree
Cancel

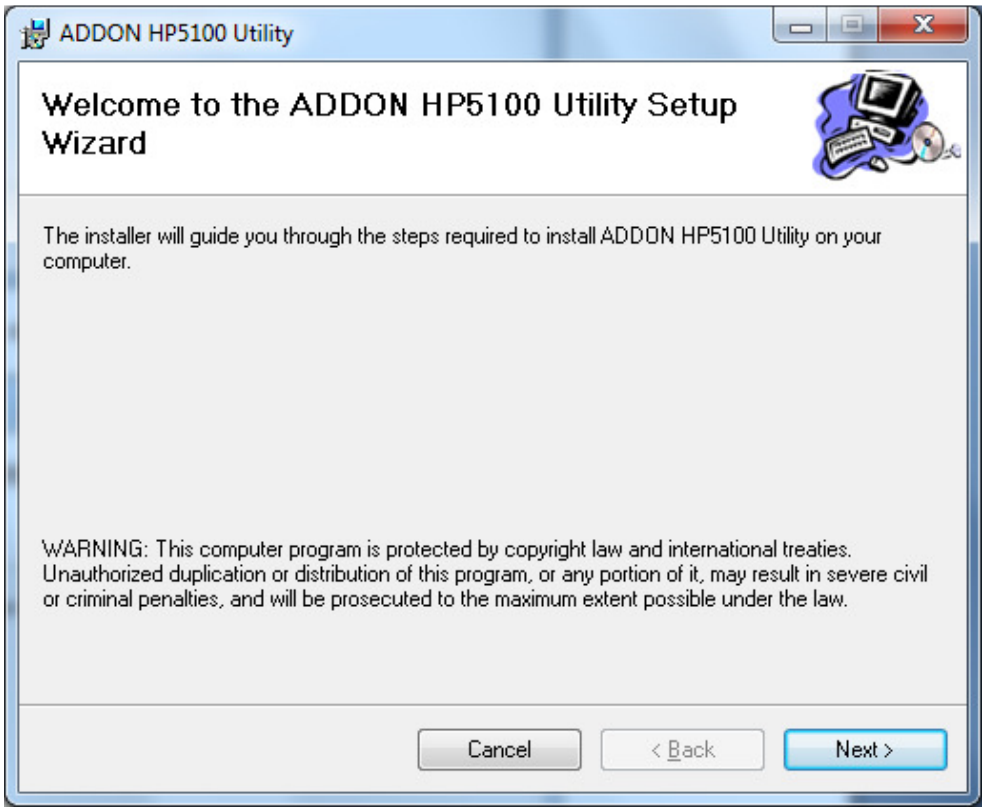
4. Click on “**Install**” to start the installation.



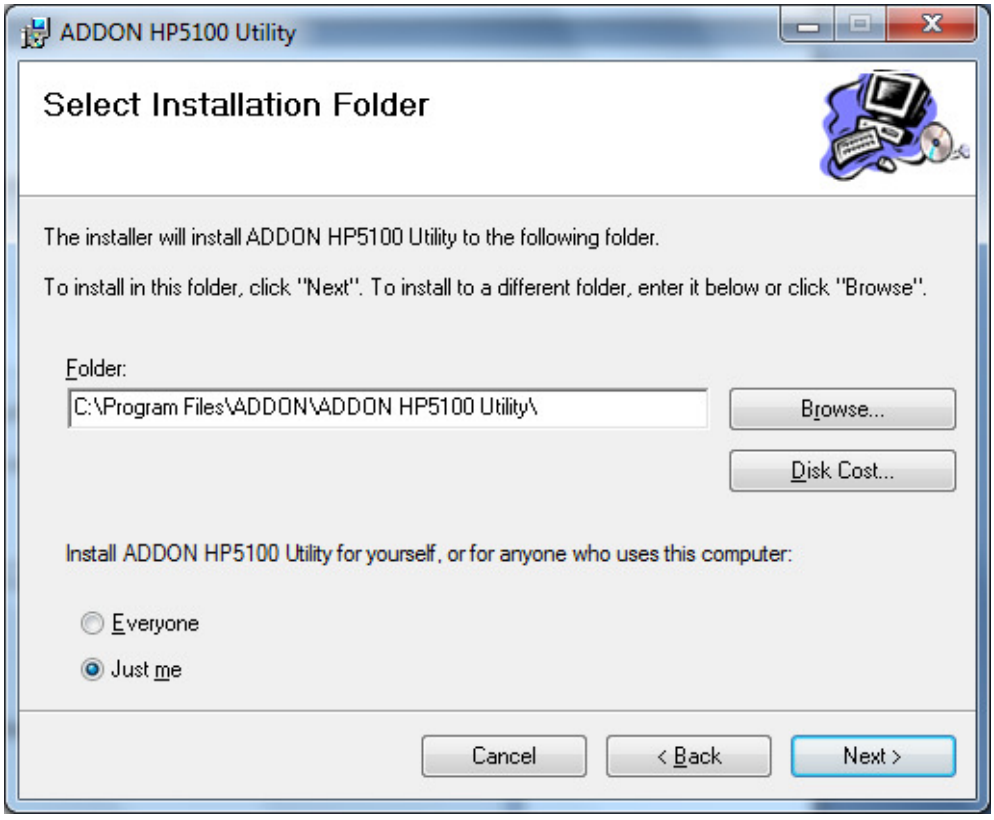
5. Click on “**Finish**” to finish WinPcap installation.



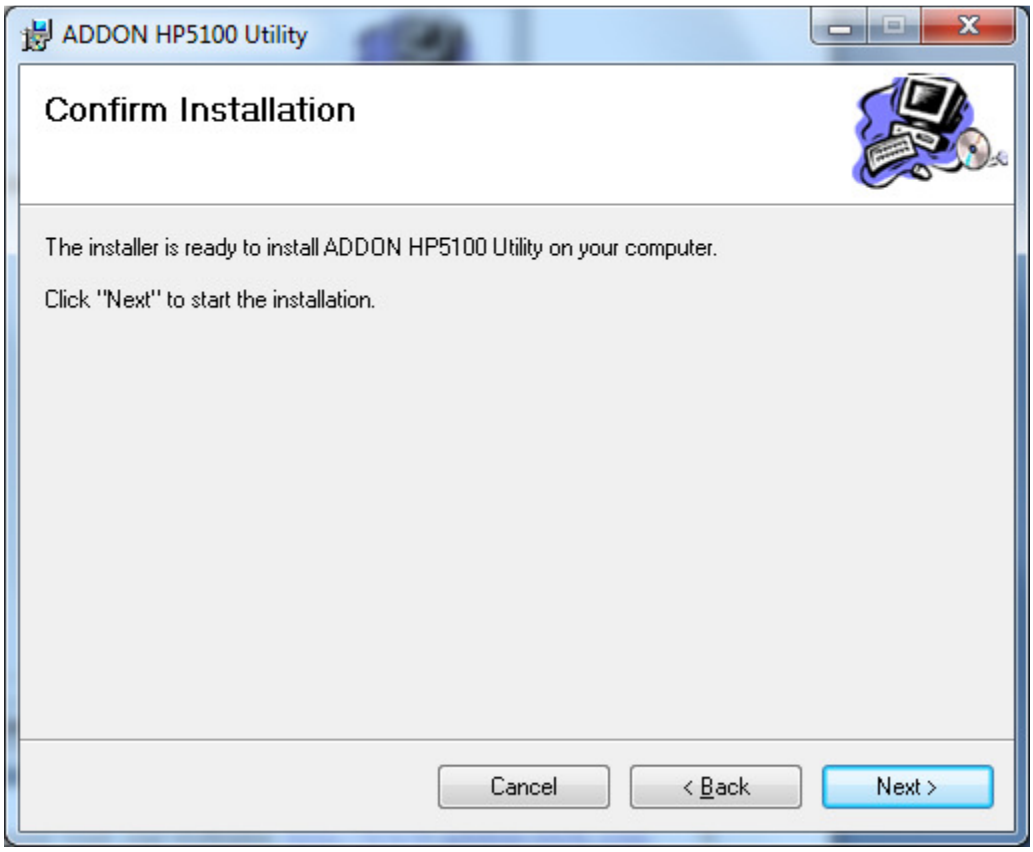
6. Go to CD-ROM drive, click on “**Setup.exe**” to start the Utility installation. And then click on “**Next**” to continue.

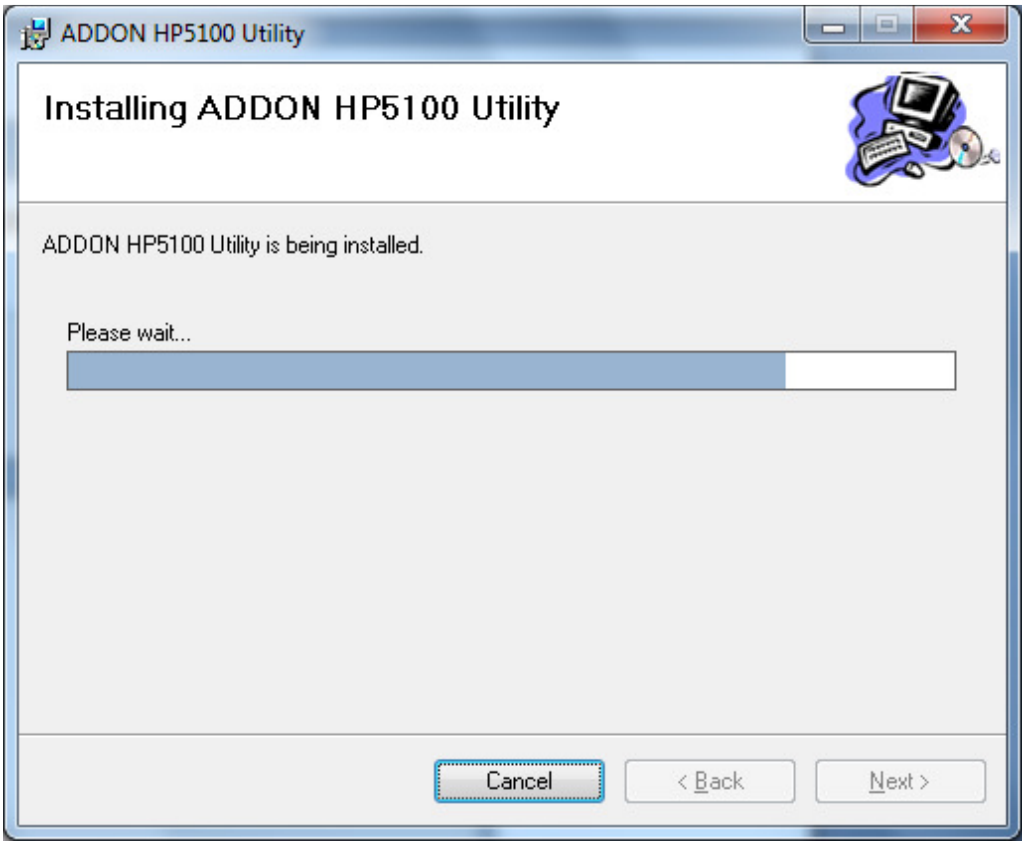

ADDON HP5100 Utility
Welcome to the ADDON HP5100 Utility Setup Wizard
The installer will guide you through the steps required to install ADDON HP5100 Utility on your computer.
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be prosecuted to the maximum extent possible under the law.
Cancel
< Back
Next >

7. Click on “**Next**” to continue.

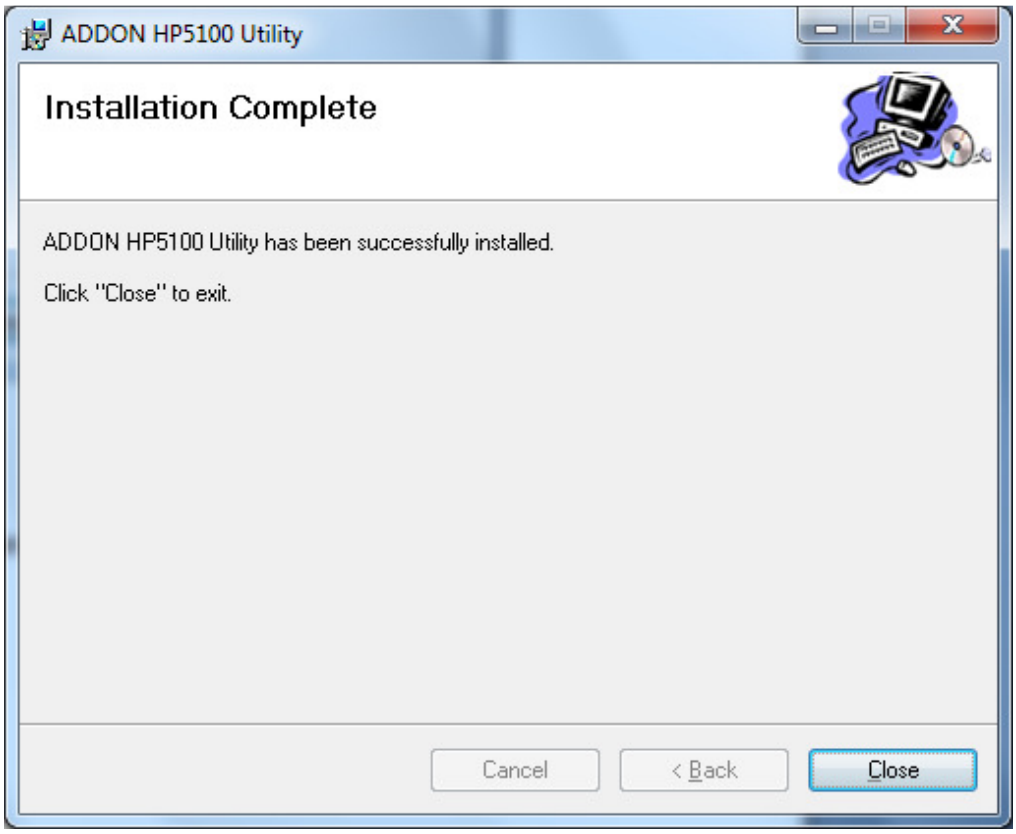

ADDON HP5100 Utility
Select Installation Folder
The installer will install ADDON HP5100 Utility to the following folder.
To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".
Folder:
C:\Program Files\ADDON\ADDON HP5100 Utility\
Browse...
Disk Cost...
Install ADDON HP5100 Utility for yourself, or for anyone who uses this computer:
Everyone
Just me
Cancel
< Back
Next >

8. Click on “**Next**” to continue.


ADDON HP5100 Utility
Confirm Installation
The installer is ready to install ADDON HP5100 Utility on your computer.
Click "Next" to start the installation.
Cancel
< Back
Next >



9. Click on “Close” to finish Utility installation.



For any further information or advanced settings on ADDON NHP5010 500Mbps Powerline AV Wireless N AP Router, please refer to user’s manual in the CD.

h) Use of the Security Pushbutton

When you have a customized Private Network Name (PPN) for your existing Powerline Network, you can easily add or remove a Powerline adapter by using the Security Pushbutton.

A Private Network Name is a string of 8 to 64 characters enables Powerline AV devices to communicate with each other.

If you intend to create multiple networks, you can assign different Private Network Names among your devices. You have to, however, make sure that at least two Powerline AVs have a similar Private Network Name. A Powerline AV that uses a unique or random Private Network Name will not be able to communicate with other devices.

If you want to **add a new Powerline adapter ('joiner')** to your existing powerline network:

1) Press the Security pushbutton on the 'joiner' for less than 3 seconds.
2) Press the Security pushbutton on any network device for less than 3 seconds, making it the 'adder'. Please press this pushbutton within 1 minute.
3) Wait for the connection to complete.
   (The Power LED indicators on both devices will flash at 1-second interval until the process succeeds or fails. If the connection is successful, the Power and Data LED indicators on both devices illuminate steadily. If the connection is failed, the Power LED indicators on both devices still illuminate steadily, but the Data LED indicators on both devices go out. In that case please repeat from Step1.)

If you want to **remove a new Powerline adapter ('leaver')** to your existing powerline network:

1) Press the Security pushbutton on the 'leaver' for more than 10 seconds. The device will reset and restart with a random NMK.
2) Wait for reset to complete.
   (The Power LED indicator on the 'leaver' will momentarily extinguish during reset and flash during restart, then illuminate steadily. The 'leaver' is removed from the existing network successfully.)

Once the process completes, you may disconnect the device from the medium or join it to another logical network on the same medium.

i) Use of the WPS Pushbutton

WPS refers to Wi-Fi Protected Setup. You can use the WPS Pushbutton to add a wireless client to a network, without setting some specific parameters, such as SSID, security mode, and password.

To use this function, a wireless client (for example your PC or Laptop) must support WPS. If the wireless client does not support WPS, you must manually configure the wireless settings of wireless client.

Just follow these two steps:

1) Press the WPS button on the NHP5010 for less than 3 seconds
2) Press the WPS button on the network card or click the PBC button in the configuration utility page of network card within two minutes to start WPS connection.

Note: If you press the WPS button on the NHP5010 for more than 5 seconds, you can enable or disable the WLAN.

j) Reset the NHP5010

If you want to restore the system for the NHP5010 to the factory default setting:

1) Press and hold the Reset button-hole for more than 3 seconds and then release it (The device must be plugged into electrical socket - The WLAN/WPS LED indicator will flash red and orange)
2) After 30 seconds, the WLAN/WPS LED indicator will flash green.
3) Unplug the NHP5010 from the power socket
4) Plug it again.

The NHP5010 has now been restored to the factory default settings.